

ABSTRACT

Vane diffuser for use in separators for separating a liquid phase and/or a particulate material from a gas flow, includes a distribution chamber that communicates with the inlet pipe stub of the separator. A top plate, a bottom plate, and a plurality of curved, parallel vanes together delimit a plurality of diffuser channels. Each of the vanes has a thickness which varies in the flow direction to ensure an even expansion of the cross-sectional area of the diffuser channels, thereby reducing reverse flow along the suction side of the vanes, as occurs with vanes of uniform thickness.